

Title (en)  
ELECTROMAGNETIC SWITCH DEVICE FOR STARTER

Title (de)  
ELEKTROMAGNETISCHE SCHALTERVORRICHTUNG FÜR ANLASSER

Title (fr)  
DISPOSITIF DE COMMUTATION ÉLECTROMAGNÉTIQUE POUR DÉMARREUR

Publication  
**EP 3282466 A4 20181219 (EN)**

Application  
**EP 15888443 A 20150407**

Priority  
JP 2015060847 W 20150407

Abstract (en)  
[origin: US2018003141A1] Provided is an electromagnetic switch device for starter in which an auxiliary relay is provided and which has a small size and can be easily manufactured. The electromagnetic switch device for starter includes: a main contact chamber forming a space in which a pair of main fixed contacts are located and a main movable contact can move; and a sub contact chamber forming a space in which a pair of sub fixed iron cores (A), (B) are located and a sub movable contact can move; and a cylindrical terminal block in which the main contact chamber and the sub coil are arranged so as to be adjacent to each other in the radial direction with a partition wall provided therebetween and separating the sub coil and the main contact chamber from each other.

IPC 8 full level  
**H01H 51/06** (2006.01); **H01H 50/14** (2006.01); **F02N 11/08** (2006.01)

CPC (source: EP US)  
**F02N 11/0851** (2013.01 - EP US); **F02N 11/087** (2013.01 - EP US); **F02N 15/006** (2013.01 - EP US); **F02N 15/067** (2013.01 - US);  
**H01H 50/023** (2013.01 - EP US); **H01H 50/14** (2013.01 - EP US); **H01H 50/40** (2013.01 - EP US); **H01H 50/42** (2013.01 - US);  
**H01H 51/065** (2013.01 - EP US); **F02N 11/0818** (2013.01 - US); **F02N 11/0825** (2013.01 - US); **F02N 15/02** (2013.01 - US);  
**F02N 15/063** (2013.01 - US); **F02N 15/067** (2013.01 - EP); **F02N 2011/0892** (2013.01 - US); **H01H 47/22** (2013.01 - US);  
**H01H 50/443** (2013.01 - EP US)

Citation (search report)  
• [A] US 5694100 A 19971202 - JACQUET RENE [FR], et al  
• [A] EP 2354533 A2 20110810 - DENSO CORP [JP]  
• See references of WO 2016162949A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**US 10344732 B2 20190709; US 2018003141 A1 20180104;** CN 107430960 A 20171201; CN 107430960 B 20190430;  
EP 3282466 A1 20180214; EP 3282466 A4 20181219; EP 3282466 B1 20191009; JP 6309165 B2 20180411; JP WO2016162949 A1 20170601;  
WO 2016162949 A1 20161013

DOCDB simple family (application)  
**US 201515541069 A 20150407;** CN 201580078174 A 20150407; EP 15888443 A 20150407; JP 2015060847 W 20150407;  
JP 2017510834 A 20150407